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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,797	11/07/2000	Andreas Schilling	18235-04726	2506
22830	7590	02/27/2006	EXAMINER	
CARR & FERRELL LLP 2200 GENG ROAD PALO ALTO, CA 94303			BRIER, JEFFERY A	
			ART UNIT	PAPER NUMBER
			2672	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/708,797

Applicant(s)

SCHILLING ET AL.

Examiner

Jeffery A. Brier

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/02/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 65, 66, 72, 73 and 78-93 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 65, 66, 72, 73, and 78-93 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on 12/02/2005 has been entered.

***Response to Arguments***

2. Applicant's arguments filed 12/02/2005 have been fully considered but they are not persuasive. The limitation added to the independent claims "in order to generate a graphical image" is not found in the originally filed application. The only reference to graphical image is in the field of the invention which states:

This invention relates generally to the field of computer graphics and more particularly to the generation and processing of textures in computerized graphical images.

It is clear the generation of graphical images is not mentioned in the specification and the drawings do not show this either, thus, this limitation adds new matter into the claims and thus, does not add a concrete useful practical result to the claimed processes.

The amendments to the claims except for claims 73 and 86 overcomes the 35 USC 112 second paragraph rejection. Applicants arguments at pages 9-10 makes the position clear that claims 73 and 78-93 claim various ordering of the claimed steps and it is clear that some of the ordering is not described in the specification.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 65, 66, 72, 73, and 78-93 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is clear the generation of graphical images is not mentioned in the specification and the drawings do not show this either, thus, the limitation "in order to generate a graphical image" adds new matter into the claims and thus, does not add a concrete useful practical result to the claimed processes.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 73 and 78-93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 73 and 79-93:

Claim 73 at line 9 claims accessing a texture map, at line 7 claims accessing a detail map and at line 11 claims associating at least one texel of the texture map with a region of the detail map. The specification on page 20 lines 13-27 describes assessing the detail map 906 and then accessing the texture map 910. See figures 9(a) and 9(b). Thus, the order in which the claims access the detail map and texture map and perform the associating are unclear as evidenced by the court cases cited by applicant at pages 9 and 10 of the 12/02/2005 response. Clearly the claim needs amending to ensure the claims claim an enabled ordering of the steps. The associating step is indefinite because the only associating performed is by the offset maps which occurs before the detail map is accessed, thus, the order of this step in the claim is unclear. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 86 claims the same method that claim 73 claims and has the same problems that is present in claim 73. Dependent claims 79-85 and 87-93 do not correct the problems of their parent claims.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 65, 66, 72, 73, and 78-93 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Since the added limitation does not have support in the originally filed specification, then the added limitation "in order to generate a graphical image" does not add a useful, concrete, and tangible result to the claims. Thus, the previous 101 non-statutory rejection is maintained and reproduced below with no modification.

This application is directed to a useful, concrete, and tangible result of generating a graphical image having generated pixel colors, however, these claims are not. These claims are directed to manipulating abstract ideas. *State Street Bank & Trust Co. v. Signature Financial Group Inc.* (CA FC) 47 USPQ2d 1596, 1603 (7/23/1998). *AT&T Corp. v. Excel Communications Inc.* (CA FC) 50 USPQ2d 1447. On page 1603 first paragraph the CAFC wrote in *State Street*:

Under *Benson*, this may have been a sufficient indicium of nonstatutory subject matter. However, after *Diehr* and *Alappat*, the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a "useful, concrete and tangible result." *Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557. 7

On page 1603 paragraph labeled [4] the CAFC wrote:

[4] The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter--but rather on the essential characteristics of the subject matter, in particular, its practical utility. Section 101 specifies that statutory subject matter must also satisfy the other "conditions and requirements" of Title 35, including novelty, nonobviousness, and adequacy of disclosure and notice. See *In re Warmerdam*, 33 F.3d 1354, 1359, 31 USPQ2d 1754, 1757-58 (Fed. Cir. 1994).

Re claims 65, 66, 72, and 78:

Claim 65:

This method claim claims manipulating an abstract idea without any concrete, useful, and tangible result. The computer generated object is an abstract computer object, not a real world tangible result. Similarly the claimed texture, texture map, specular reflected light intensity, specular reflectance coefficient and specular reflectance coefficient map are abstract.

Claim 66:

This claim abstractly claims a mathematical formula without producing a concrete, useful, and tangible result.

Claim 72:

This claim is an electronically-readable medium storing a program for permitting a computer to perform in essence the method set forth in claim 65. As stated by the CAFC in *State Street* "The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter--but rather on

the essential characteristics of the subject matter, in particular, its practical utility." This claim merely claims a computer program that permits a computer to perform an abstract process without any useful and concrete results, see the reasons given for claim 65.

Claim 78:

This claim is an electronically-readable medium storing a program for permitting a computer to perform in essence the method set forth in claim 66. This claim merely claims a computer program that permits a computer to perform a mathematical formula without producing a concrete, useful, and tangible result.

Claim 73:

This claim is an electronically-readable medium storing a program for permitting a computer to perform a method that does not produce a useful, concrete and tangible result. The courts have held the step of displaying a calculation as a gray code scale to be non-statutory. *In re Abele*, 684 F.2d 902, 908, 214 USPQ 682, 687 (CCPA 1982). The claimed color is a gray code scale that is eventually displayed. *Abele*, 684 F.2d at 908, 214 USPQ at 687 stated "The specification indicates that such attenuation data is available only when an X-ray beam is produced by a CAT scanner, passed through an object, and detected upon its exit. Only after these steps have been completed is the algorithm performed, and the resultant modified data displayed in the required format.". This court case indicated a safe harbor exists when the claimed process is a method of displaying X-ray attenuation data as a signed gray scale signal in a "field" using a particular algorithm, where the antecedent steps require generating the data using a particular machine (e.g., a computer tomography scanner). As stated above the

computer generated object, the texture map, and detail map, are abstract non-tangible computer objects. The determining a detail color, determining a texture color, and combining steps are similar to that which was decided in Abele. One pixel's color is being controlled by the claimed process. This is merely determining the result of the mathematical operation in the method. Abele teaches this is non-statutory. This claim needs to be amended to claim a practical utility in a "field" using the claimed algorithm.

The preamble states "an electronically-readable medium storing a program for permitting a computer to perform a method". It is not clear if the stored program causes the computer to perform the claimed method or just allows the computer to perform the method such as an operating system.

Claims 79-85:

These dependent claims do not add a practical utility to independent claim 73. They also do not correct the problem with the preamble.

Claims 86-93:

These method claims correspond to electronically-readable medium claims 73 and 79-85. These claims are broader than claims 73 and 79-85 because these claims are method claims which claims the same steps as claimed in claims 73 and 79-85 without the electronically-readable medium limitations. Therefore these claims are non-statutory for the reasons given for claims 73 and 79-85.

9. A prior art rejection cannot be made because the metes and bounds of the claims are not definite and because the specification does fully teach the claims. Thus, an indication of allowability would be premature. In re Steele, 305 F.2d 859,134 USPQ 292 (CCPA 1962) (it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

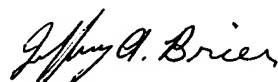
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to

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reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffery A Brier  
Primary Examiner  
Art Unit 2672